

STATE OF MISSOURI
DEPARTMENT OF NATURAL RESOURCES
MISSOURI CLEAN WATER COMMISSION



MISSOURI STATE OPERATING PERMIT

GENERAL PERMIT

In compliance with the Missouri Clean Water Law, (Chapter 644 R.S. Mo. as amended, hereinafter, the Law), and the Federal Water Pollution Control Act (Public Law 92-500, 92nd Congress) as amended,

Permit No. < MO-G821xxx >

Owner: < name >
Address: < address >

Continuing Authority: < name, or Same as above >
Address: < address, or Same as above >

Facility Name: < name >
Facility Address: < physical address >

Legal Description: ¼, ¼, ¼, Sec. xx, TxxN, RxxW, < county > County

Receiving Stream: < receiving stream > < (U, C, P, L1, L2, L3) >
First Classified Stream and ID: < 1st classified stream > < (U, C, P, L1, L2, L3) > < (ID number) >
USGS Basin & Sub-watershed No.: < (USGS HUC14 #) >

is authorized to discharge from the facility described herein, in accordance with the effluent limitations and monitoring requirements as set forth herein:

FACILITY DESCRIPTION

All Outfalls – SIC #4952

Land application of domestic septage onto agricultural land for beneficial use as fertilizer and soil amendment for total volume up to 1,000,000 gallons per year that are land applied in accordance with an approved land Application Management Plan that conforms to the Best Management Practices and other requirements contained in the general permit. Lime stabilization is required prior to land application and application rates shall not exceed 10,000 gallons/acre per year.

This permit authorizes only wastewater, including storm waters, discharges under the Missouri Clean Water Law and the National Pollutant Discharge Elimination System; it does not apply to other regulated areas. This permit may be appealed in accordance with Section 644.051.6 of the Law.

October 4, 2002

Effective Date

Issue Date

Stephen M. Mahfood, Director, Department of Natural Resources
Executive Secretary, Clean Water Commission

October 3, 2007

Expiration Date
MO 780-0041 (10-93)

Jim Hull, Director of Staff, Clean Water Commission

APPLICABILITY

1. This general permit authorizes the land application of domestic wastewater septage onto grassland, cropland, or timberland at rates suitable for beneficial use as organic fertilizer and soil conditioner. Septage means pumpings from septic tanks or wastewater treatment works serving less than 150 persons. It does not include grease traps, or units receiving industrial waste.
2. A separate permit is required for each DNR region where septage will be land applied. The permittee may choose to obtain a separate permit for each application site. This permit covers only those land application sites located within the Regional Office boundaries listed in the facility description.
3. Total amount of septage land applied under the general permit shall not exceed 1,000,000 gallons per year based on septage volumes as pumped from the septic tank or generating wastewater treatment works prior to addition of lime or other treatment processes.
4. If at any time the Missouri Department of Natural Resources determines that the quality of waters of the state may be better protected by requiring the owner/operator of a permitted site to apply for a site specific permit, the department may require any person to obtain a site specific operating permit (10 CSR 20-6.010(13)).

The department may require the permittee to apply for and obtain a site specific or different general permit if, but not limited to:

- (a) The permittee is not in compliance with the conditions of this general permit;
- (b) Information becomes available that indicates water quality standards have been or may be violated; or
- (c) If the department determines that quality of waters of the state should be better protected.

The permittee will be notified in writing of the need to apply for a site-specific permit or a different general permit. When a site-specific permit or different general permit is issued to the authorized permittee, the applicability of this general permit to the permittee is automatically terminated upon the effective date of the site specific or different general permit, whichever the case may be.

5. Any owner/operator authorized by a general permit may request to be excluded from the coverage of the general permit and apply for a site-specific permit (10 CSR 20-6.010(13)).
6. The general permit application shall include a Land Application Management Plan to address the Best Management Practices and other requirements contained in this permit.

EXEMPTIONS FROM STATE PERMIT REQUIREMENTS

1. Persons that land apply under the operating permit issued to the wastewater treatment works generator.
2. Persons that transport septage to a permitted wastewater treatment facility.

REQUIREMENTS AND BEST MANAGEMENT PRACTICES

1. The facility shall be operated as a no-discharge facility in accordance with 10 CSR 20-6.015(1)(B)7. A no-discharge facility is a facility designed and operated:
 - (a) to hold or land apply without direct discharge to surface or subsurface waters of the state, all waste flows and associated storm water flows for the wettest one-in-ten year precipitation and the twenty-five year twenty-four hour rainfall;
 - (b) wastes are not land applied during frozen, snow covered, or saturated soil conditions; and
 - (c) any basin must be sealed in accordance with 10 CSR 20-8 and there must not be subsurface release in violation of 10 CSR 20-7.015.
2. A construction permit is required for installation of any storage structure. As-built specifications and operating manual shall be submitted with the initial operating application for general permit. Lagoon basins shall be operated so that maximum water elevation does not exceed one foot below the overflow point except due to the rainfall exceptions in this permit. The minimum operating water level shall be clearly marked and lagoons/storage basins shall be lowered to this minimum level during suitable land application periods. The storage basin shall always be lowered to the minimum level prior to each winter.
3. Prior to land application, septage shall be treated by lime stabilization in order to significantly reduce pathogens and vectors. Add 50 pounds of hydrated lime to each 1,000 gallons of septage and hold for at least 30 minutes before land applying. Do not add the lime to the septic tank, as this will harm the beneficial bacteria needed in the septic tank.
4. Plastic, paper, and other solid material exceeding one half (0.5) inch in diameter shall not be land applied.
5. Land application rates shall not cause surface ponding of applied waste or runoff from the application sites during land application. Annual application rates shall not exceed 10,000 gallons/acre/year.
6. Land application shall not occur within 300 feet of a well, sinkhole, or losing stream; 150 feet from dwellings; and 50 feet from the property line, drainage ditch, watercourse, or stream bank, including intermittent flowing streams.
7. Septage shall not be land applied within 30 days prior to crop harvesting or grazing by cattle.
8. Do not land apply on field slopes exceeding 12 percent.
9. Land application shall not occur during frozen, snow covered, or saturated soil conditions. Septage shall not be applied to crops grown for human consumption except under the following conditions:
 - (a) the septage is incorporated and food crops with harvested parts that touch the septage/soil mixture and are totally above the land surface shall not be harvested for 14 months after septage is applied;
 - (b) food crops with harvested parts below the surface of the land shall not be harvested for 20 months after septage is applied when the septage remains on the land surface for four months or longer prior to incorporation;
 - (c) food crops with harvested parts below the surface of the land shall not be harvested for 38 months after septage is applied when the septage remains on the land surface for less than four months prior to incorporation;
 - (d) the septage has been treated by a process to further reduce pathogens such as composting or equivalent treatment processes.

REQUIREMENTS AND BEST MANAGEMENT PRACTICES (continued)

10. Septage shall be land applied using application equipment that can spread the material uniformly over the entire application site. Dumping in batches or piles or spreading of a pile using a blade, disc, or similar equipment is not acceptable.
11. Land application equipment shall be properly operated and maintained and shall be visually checked daily during land application.
12. Land application site shall be well vegetated during the application periods or vegetation should be established as soon as practicable after septage incorporation within the normal crop planting season.
13. Provide adequate septage storage or alternate disposal method as needed to match the land application windows for crop planting, harvesting, and inclement weather conditions. Operate storage basins so there is no discharge to waters of the state.
 - (a) Recommended storage for grassland sites ranges from 60 to 120 days as follows: 60 days south of Highway 60; 75 days between Highway 60 and Highway 50; 90 days between Highway 50 and Highway 36; and 120 days north of Highway 36.
 - (b) If storage is not provided, the septage shall be hauled to a permitted wastewater treatment facility during inclement weather conditions when land application is not allowed.
14. These requirements do not supersede nor remove liability for compliance with county and other local ordinances.
15. General Criteria:

The following water quality criteria shall be applicable to all waters of the state at all times including mixing zones. No water contaminant, by itself or in combination with other substances, shall prevent the waters of the state from meeting the following conditions:

- (a) Waters shall be free from substances in sufficient amounts to cause the formation of putrescent, unsightly or harmful bottom deposits, or prevent full maintenance of beneficial uses;
 - (b) Waters shall be free from oil, scum, and floating debris in sufficient amounts to be unsightly or prevent full maintenance of beneficial uses;
 - (c) Waters shall be free from substances in sufficient amounts to cause unsightly color or turbidity, offensive odor, or prevent full maintenance of beneficial uses;
 - (d) Waters shall be free from substances or conditions in sufficient amounts to result in toxicity to human, animal, or aquatic life;
 - (e) There shall be no significant human health hazard from incidental contact with the water;
 - (f) There shall be no acute toxicity to livestock or wildlife watering;
 - (g) Waters shall be free from physical, chemical, or hydrologic changes;
 - (h) Waters shall be free from used tires, car bodies, appliances, demolition debris, used vehicles or equipment and solid waste as defined in Missouri's Solid Waste Law, section 260.200, RSMo, except as the use of such materials is specifically permitted pursuant to section 260.200-260.247.
16. All operators shall be provided training in proper land application procedures as outlined in this permit and in the Land Application Plan contained in the application.

RECORDS AND REPORTING REQUIREMENTS

1. Daily records for lime stabilization treatment, site locations, site owners, dates and amounts of land application at each site, and the total gallons/acre/year applied to each site shall be maintained for a period of five years.
2. A summary of the land application records shall be submitted each year by January 28th. The summary shall consist of map showing location of land application sites, name and address of land owners, lime stabilization records, the gallons/acre/year applied for each site, and total gallons land applied each year. The summary shall also include how septage was handled during periods when land application was not suitable.
3. A record keeping form shall be submitted with the general permit application.
4. All records and reports required under this permit shall be made available for inspection by the department during normal working hours and copies of such records and reports shall be provided upon request by the department.
5. Haulers shall keep a copy of this permit in their vehicles whenever hauling or land applying septage.

PERMIT TRANSFER

This permit may be transferred to a new owner by submitting an "Application for Transfer of Operating Permit" signed by the seller and buyer of the facility, along with the appropriate modification fee.

TERMINATION

In order to terminate this permit, the permittee shall notify the department by submitting Form H, included with the State Operating Permit. The permittee shall complete Form H and mail it to the department at the address noted in the cover letter of this permit. Proper closure of any storage structure is required prior to permit termination. A closure plan shall be submitted to the department and approved prior to initiating closure activities.

PERMIT RENEWAL

Page 1 of this permit specifies the expiration date of this permit. The "issue date" is the date the State Operating Permit is issued to the applicant. If land application will continue after the expiration date of this general permit, then the permittee must reapply to the department for the permit to be re-issued. The permittee will receive notification of the expiration date of the permit 180 days before the expiration date listed on page 1 of this permit. In order for the permit to be re-issued, the permittee should submit appropriate application form(s) at least 90 days before the expiration of the permit.